| Index | <br> |  |
|-------|------|--|
|       |      |  |

| _ | Application No. | Applicant(s)    |
|---|-----------------|-----------------|
|   | 10/008,268      | KATES, JAMES M. |
|   | Examiner        | Art Unit        |
|   | Suhan Ni        | 2615            |

| √  | Rejected |
|----|----------|
| II | Allowed  |

| _ | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| ÷ | Restricted                     |

| N | Non-Elected  |
|---|--------------|
| ı | Interference |

| A | ١. | Appeal   |
|---|----|----------|
| C | )  | Objected |

| Cla      | laim Date |              |                |                |              |                |                |              | Claim Date   |          |      |                        |          |              | Claim Date |                 |  |          |          |          |          |          |      |       |          |                |       |     |          |          |          |          |          |          |
|----------|-----------|--------------|----------------|----------------|--------------|----------------|----------------|--------------|--------------|----------|------|------------------------|----------|--------------|------------|-----------------|--|----------|----------|----------|----------|----------|------|-------|----------|----------------|-------|-----|----------|----------|----------|----------|----------|----------|
| <u> </u> | ĺ         |              |                |                |              |                |                |              |              | T        |      | П                      |          |              |            |                 | <del>                                     </del> |          |          |          |          |          |      |       |          |                |       |     |          |          |          |          |          |          |
| Final    | Original  | 10/22/04     | 9/25/05        | 3/14/06        | 9/2/06       | 3/12/07        |                |              |              |          |      | Final                  | Original | 3/14/06      | 9/2/06     | 3/12/07         |  |          |          |          |          |          |      | Final | Original |                |       |     |          |          |          |          |          |          |
| -        | 1         | .√           | 1              | 1              | H            | 一              | ├-             | ├-           | ╁            | -        | n.   |                        | 51       | N            | -          | -               |  |          | $\dashv$ |          | $\dashv$ | -        | ŀ    |       | 101      | -              | $\pm$ | +   | +        |          | -        |          | $\dashv$ | ᅥ        |
| 17       | 2         | 1            | V              | 1              | 1            | =              | ╁╌             | ╁╾           | ⊢            |          | 1    |                        | 52       | N            | -          | -               |  |          | $\dashv$ | -        | $\dashv$ | $\dashv$ | ŀ    |       | 102      | $\dashv$       | +     | +   | ┪        | $\dashv$ | ᅱ        | -        | $\dashv$ | ᅱ        |
| 18       | 3         | 1            | 1              | 1              | 1            | =              | ┢┈             | -            | ┢            |          |      | <b></b>                | 53       | N            | ┢          | ├               | -  | $\dashv$ | $\dashv$ | -        |          | $\dashv$ | - }  |       | 103      | <del>- l</del> | ╁     | +   | $\dashv$ | -        | $\dashv$ |          |          | $\dashv$ |
| 10       | 4         | Ť            | H              | <del>  `</del> | ۲            | F              | ╁              | $\vdash$     | ┢            | -        |      | $\vdash$               | 54       | N            | $\vdash$   | $\vdash$        | -  | $\dashv$ | -        | -        | -        | $\dashv$ | ŀ    |       | 104      |                | +     | +   | ᅱ        | 一        |          |          | $\dashv$ | ᅱ        |
| $\vdash$ | 5         | $\vdash$     | ┢              | ┝              | ⊢            | ⊢              | ├              | ┼            | ├            | $\vdash$ | 4.   | $\vdash$               | 55       | N            | -          | -               |  |          | $\dashv$ |          | $\dashv$ | $\dashv$ | . }  |       | 105      | -              | +     | +   | $\dashv$ | $\dashv$ | $\dashv$ |          |          | $\dashv$ |
|          | 6         | <del> </del> | ⊢              | ⊢              | -            | -              | ⊢              | ┢            | ├            | ┝        |      | <del></del>            | 56       | N            | $\vdash$   | H               | Н  | $\dashv$ | -        | $\dashv$ | $\dashv$ | ᅱ        |      |       | 106      |                | +     | +   | ┪        | ᅱ        |          | $\vdash$ | $\dashv$ | $\dashv$ |
|          | 7         |              |                | -              | ┢            | $\vdash$       | ┝              | ⊢            | ⊢            | -        | 154  |                        | 57       | N            | ⊢          |                 | Н  | -        | $\dashv$ | -        | -+       |          |      |       | 107      | +              | +     | +   | $\dashv$ | $\dashv$ | $\dashv$ |          | $\dashv$ | $\dashv$ |
|          | 8         | $\vdash$     | $\vdash$       | -              | ┢            | -              | ╁╌             |              | ├            | _        |      |                        | 58       | N            |            | $\vdash$        |  |          | $\dashv$ | -        | -        | ┈┤       | }    |       | 108      | -              | +     | +   | $\dashv$ | $\dashv$ | $\dashv$ | Н        | -        | ᅥ        |
| -        | 9         | ┢            | -              | $\vdash$       |              | ├一             | $\vdash$       | $\vdash$     | $\vdash$     | ┢        | ħ.,  |                        | 59       | N            | $\vdash$   |                 |  | $\dashv$ | -+       | $\dashv$ | $\dashv$ | $\dashv$ |      |       | 109      |                |       | ╁   | -        | -        | $\dashv$ |          | $\dashv$ | ᅱ        |
| -        | 10        | ├            | $\vdash$       | $\vdash$       | -            | ├              | -              | -            | ╁            | ├─       |      | 13                     | 60       | =            | =          | =               |  | -        | $\dashv$ | -        | -+       | ᅱ        | 1    |       | 110      | -              | +     | +   | $\dashv$ | $\dashv$ | $\dashv$ |          | $\dashv$ | 一        |
|          | 11        | ├            | ┢              | ┝              | ⊢            | ⊢              |                | ├            | -            | ┝        | 7.77 | 14                     | 61       | =            | =          | =               | -  | -        | $\dashv$ |          | $\dashv$ | $\dashv$ | 1    |       | 111      |                | +     | +   | ┥        |          | -        | $\vdash$ | ᅱ        | $\dashv$ |
|          | 12        | $\vdash$     | ⊢              |                | ├            | $\vdash$       | $\vdash$       | ╁╌           | ├            |          |      | 15                     | 62       | =            | =          | =               | $\vdash$   | $\dashv$ | -+       | $\dashv$ | $\dashv$ | ᅱ        | r i  |       | 112      | -1             | +     | +   | ┪        |          | $\dashv$ |          | $\dashv$ | ᅱ        |
|          | 13        | -            | <del> </del>   | <u> </u>       | ⊢            | ⊢              | -              | $\vdash$     | ├            |          | : 1, | - -                    | 63       | N            | ⊢          | <del> -</del> - |  | $\dashv$ | $\dashv$ | -        | $\dashv$ | $\dashv$ | · }  |       | 113      | -              | +     | +   | $\dashv$ | $\dashv$ | $\neg$   |          | ᅱ        | ᅱ        |
| <u> </u> | 14        | $\vdash$     | $\vdash$       | ┝              | ┢            | <del>  -</del> | 1—             | ⊢            |              | -        | 1    | $\vdash$               | 64       | N            | ⊢          | H               | -  | $\dashv$ | -        | $\dashv$ | $\dashv$ | $\dashv$ | 1    |       | 114      |                | +     |     | ┨        | $\dashv$ | $\dashv$ |          |          | $\dashv$ |
| <u> </u> | 15        | H            | $\vdash$       | _              | H            | <u> </u>       | ├              | <del> </del> | ┢            | ├─       | 1.4  |                        | 65       | N            | $\vdash$   | $\vdash$        |  | $\dashv$ | -+       |          | -        | ᅱ        |      |       | 115      |                | +     | +   | $\dashv$ | -        | $\dashv$ |          | ┪        | $\dashv$ |
| -        | 16        |              | H              | <u> </u>       | ├            | ⊢              | ⊢              | ⊢            | ⊢            | ⊢        |      | $\vdash$               | 66       | N            | -          |                 |  | $\dashv$ | -+       |          |          |          | - 1  |       | 116      | -              | +     | +   | -        |          |          | Н        | $\dashv$ | $\dashv$ |
| -        | 17        | -            | -              | <del> </del>   | ├-           | $\vdash$       | -              | -            | -            | ┝        |      |                        | 67       | IN.          | 1          |                 | $\vdash$   |          | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | ij#  |       | 117      |                | +     | +   | -        | $\dashv$ | -        |          | $\dashv$ | $\dashv$ |
| <b>—</b> | 18        |              | H              | -              | -            | ├              | ⊢              | $\vdash$     | ┢            | ├        | 7.   | 23                     | 68       | $\vdash$     | 1          | =               | -  |          | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | J.   |       | 118      | -+             | -     | +   | $\dashv$ |          | -        |          |          | $\dashv$ |
| -        |           | _            | -              | -              |              | ⊢              | ⊢              | $\vdash$     | ⊢            | -        |      | 16                     | 69       | -            | \ <u>\</u> | =               |  | $\dashv$ | ┥        | $\dashv$ | $\dashv$ | ᅱ        | 1    |       | 119      | $\dashv$       | +     | +   | $\dashv$ | $\dashv$ | $\dashv$ | $\vdash$ | $\dashv$ | $\dashv$ |
|          | 19        |              | -              | -              | ⊢            |                |                | -            | ⊢            | -        |      | 24                     | 70       |              | -          | =               | -  |          | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |      |       | 120      | $\dashv$       | +     | +   | $\dashv$ | $\dashv$ | -        |          | $\dashv$ | $\dashv$ |
| <u> </u> | 20        | <u> </u>     | ⊢              |                | <del> </del> | -              |                | -            |              | -        | 4.   | 25                     | 71       | ⊢            | ⊢          | =               | $\vdash$   |          | $\dashv$ |          |          |          | -    | •     | 121      | +              | +     | +   | ┥        | $\dashv$ |          | -        |          | $\dashv$ |
| <u> </u> | 21        |              |                | _              | ┝            | ⊢              | ⊢              | $\vdash$     | _            | -        | 100  | 26                     | 72       | -            | $\vdash$   | =               |  | -        | -        | $\dashv$ | $\dashv$ | $\dashv$ | -    |       | 122      | $\dashv$       | +     | +   | -+       |          | -        |          |          | $\dashv$ |
|          | 22        | -            | ┢              | _              | -            | _              | ⊢              | ┢            |              | _        | 14   | 20                     |          | $\vdash$     | -          | -               |  |          | $\dashv$ | $\dashv$ | -        | $\dashv$ | -    |       | 123      | $\dashv$       | +     | +   | $\dashv$ | $\dashv$ | -        | -        | -        | $\dashv$ |
|          | 23        |              | H              |                | <del> </del> | <del> </del>   | ⊢              | ⊢            | H            | H        | 5    | <u> </u>               | 73       | ⊢            | H          | -               |  | -        | -        | $\dashv$ |          | ᅫ        | - }  |       | 123      | $\dashv$       | +     | +   | $\dashv$ | $\dashv$ | -        | -        | -        | ᅴ        |
|          | 24        | ⊢            | ⊢              | _              | <u> </u>     | -              | ⊢              | ┝            | -            | ┡        |      | $\vdash$               | 74<br>75 | ⊢            | H          | -               | _  |          | -        |          | $\dashv$ | ᅴ        | .    |       | 125      | $\dashv$       | +     | +   | 4        | $\dashv$ | -        | -        | -        | ႕        |
|          | 25        | -            |                |                | <del> </del> |                |                | -            |              |          | . 7  | $\vdash$               | 76       | ├            |            | -               | _  |          | -+       |          | $\dashv$ | $\dashv$ | ŀ    |       | 126      | $\dashv$       | +     | -+- | -        | -        |          |          | -        | {        |
|          | 26        | -            |                | -              | ┝            | ⊢              | ├-             | -            |              | _        |      | $\vdash$               | 77       |              | -          | -               | -  | -        | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | - 1  |       | 127      | $\dashv$       | +     | +   | -        |          | -        | -        |          |          |
|          | 27        | ┝            | ┝╌             | -              | ┝            | ⊢              | $\vdash$       | ┝            | _            | _        | 50,4 | $\vdash$               | 78       | ├            | -          | -               |  |          | -        |          | $\dashv$ | $\dashv$ | 1    |       | 128      | <del></del>    | +     | +   | ┥        | $\dashv$ | -        | $\dashv$ |          | $\dashv$ |
|          | 28<br>29  |              | H              | -              | ┝            | _              |                | ┝            |              |          |      | $\vdash \vdash \vdash$ | 79       |              | -          | -               |  | -        | -        |          |          | $\dashv$ |      |       | 129      |                | +     | +   | -        | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |
|          |           | -            | <del>  _</del> | Ŀ              | ┢            | ╘              | ┝              | ⊢            | -            | -        |      | $\vdash$               | 80       | ├            | -          | -               | -  | -        |          | -        | -        | $\dashv$ |      |       | 130      |                | +     | +   | -        | $\dashv$ | $\dashv$ | -        |          | $\dashv$ |
| 1        | 30        | =            | =              | =              | =            | =              | $\vdash$       | ⊢            |              | ⊢        | 44   | <del>  </del>          | 81       | ⊢            | $\vdash$   | -               |  |          | $\dashv$ |          | $\dashv$ | $\dashv$ |      |       | 131      | $\dashv$       | +     | +   |          |          |          |          | $\dashv$ | $\dashv$ |
| 2        | 31        | _            | =              | =              | =            | —              | ⊢              | ┢            | -            |          | 4.4  |                        | 82       | <del> </del> | _          | -               | -  | -        | $\dashv$ |          |          | $\dashv$ | . 1  |       | 132      | $\dashv$       | +     | ╁   | -        |          | $\dashv$ |          | $\dashv$ | $\dashv$ |
| 3        |           | =            | =              | =              | =            | =              | ⊢              | -            | -            | ⊢        |      |                        | 83       |              | -          | -               |  |          | $\dashv$ |          | -+       |          | . }  |       | 133      | $\dashv$       | -     | ┿   | -        |          | -        | -        | $\dashv$ | $\dashv$ |
| 4        | 33        | =            | -              | -              | -            | -              | -              |              | $\vdash$     | <u> </u> |      | $\vdash$               |          | -            |            | -               | -  | $\dashv$ | $\dashv$ |          | $\dashv$ | $\dashv$ | -    |       | 134      | -+             | +     | +   | +        | -        | $\dashv$ | -        | $\dashv$ | 긕        |
| 5        | 35        | =            | =              | =              | =            | =              | 1—             | $\vdash$     | $\vdash$     | $\vdash$ |      |                        | 84<br>85 | $\vdash$     | $\vdash$   | H               |  |          | $\dashv$ | -        | -+       |          | , }  |       | 135      | $\dashv$       | +     | +   | -        |          | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |
| 7        |           | =            | =              | =              | =            | =              | -              |              | <b>—</b>     | -        | "    | $\vdash$               | 86       | -            | -          | Н               | $\dashv$   | $\dashv$ |          | -        | $\dashv$ | ᅴ        |      |       | 136      | $\dashv$       | +     | +   | +        | -        | -        |          |          | 긕        |
|          | 36        | =            | —              | _              | -            | =              | ├-             | ├            |              | <u> </u> |      |                        |          | $\vdash$     |            | Н               | $\dashv$   | $\dashv$ | $\dashv$ | $\dashv$ |          | ᅴ        | . }  |       | 137      | $\dashv$       | +     | +   | -        | $\dashv$ | $\dashv$ |          | $\dashv$ | $\dashv$ |
| 8        | 37        | =            | =              | =              | =            | -              | -              | ├            | $\vdash$     | _        |      | <del></del>            | 87       | -            |            | Н               | $\vdash$   | $\dashv$ | -+       | $\dashv$ | +        | ᅴ        | në j |       | 138      | $\dashv$       | +     | +   | -        | $\dashv$ | -        |          |          | $\dashv$ |
| 9        | 38        | =            | =              | =              | =            | =              | $\vdash$       | ├            | $\vdash$     | <u> </u> |      | $\vdash$               | 88       |              |            | Н               |  |          | +        |          | $\dashv$ | ᅴ        | 1.0  |       |          |                | +     | +   | 4        | $\dashv$ |          | _        | $\dashv$ | ᅴ        |
| 10       | 39        | =            | =              | =              | =            | =              | ├              | ├            | -            | <u> </u> |      | $\vdash$               | 89       | <u> </u>     | $\vdash$   | Н               | $\vdash$   |          | $\dashv$ | _        |          | -1       | . }  |       | 139      | $\dashv$       | +     | +   | -        |          | $\dashv$ |          |          | $\dashv$ |
| 11       | 40        |              | $\perp$        |                |              |                | <del> </del> — | $\vdash$     | $\vdash$     | <u> </u> |      | <b> </b>               | 90       | -            | <u> </u>   | $\vdash\vdash$  | $\vdash$   | $\dashv$ | -+       | -        | $\dashv$ |          | -    |       | 140      | $\dashv$       | +     | +   | 4        |          |          |          | -        | $\dashv$ |
| 19       | 41        | 1            | 1              | 1              | 1            | =              | $\vdash$       | $\vdash$     | <del> </del> | $\vdash$ |      |                        | 91       | ├            | <b>—</b>   | Н               | $\vdash$   | $\dashv$ | -        | -        |          |          |      | . —   | 141      | $\dashv$       |       | +   | -        |          | -        |          | $\dashv$ | ᅴ        |
| 20       | 42        | 1            | 1              | 1              | 1            | =              | $\vdash$       | -            | <del> </del> | <b>!</b> |      | <u> </u>               | 92       |              |            | $\vdash$        | -  |          |          | -        | $\dashv$ | _        | 1    |       | 142      | $\dashv$       |       | +   | 4        |          |          | -        | $\dashv$ | $\dashv$ |
| 21       | 43        | 1            | 1              | 7              | 1            | =              | ├—             | $\vdash$     | H            | <u> </u> |      | $\vdash\vdash\vdash$   | 93       | ├            | <b> </b>   | Н               |  |          | -+       |          | $\dashv$ | _        | ŀ    |       | 143      | $\dashv$       | +     | +   | -        |          | $\dashv$ | $\dashv$ |          |          |
| 22       | 44        | 1            | 1              | 7              | 1            | =              | <del> </del>   | $\vdash$     | H            |          | :    | $\vdash$               | 94       | -            | <b> </b>   | Н               | $\vdash$   |          | $\dashv$ |          | $\dashv$ | _        | ŀ    |       | 144      | -              | +     | +   |          |          | $\dashv$ | _        |          |          |
|          | 45        | <u> </u>     |                | N              | $\vdash$     | $\vdash$       | $\vdash$       | $\vdash$     | $\vdash$     | <u> </u> | l    |                        | 95       | <u> </u>     | <u> </u>   | $\vdash\vdash$  | $\dashv$   |          |          | _        | $\dashv$ | _        | -    |       | 145      | $\dashv$       | +     | +   | 4        |          |          |          |          | $\dashv$ |
| <u></u>  | 46        | -            |                | N              | $\vdash$     | <u> </u>       | -              | <b>├</b>     | <u> </u>     | Ь.       | , .* | $\vdash \vdash$        | 96       | ⊢            | $\vdash$   | Н               | $\dashv$   | -        | -        | -        | $\dashv$ | 4        | ŀ    |       | 146      | $\dashv$       | -     | +   | 4        | -        | $\dashv$ | $\dashv$ |          | _        |
| <u> </u> | 47        | <u> </u>     | $\vdash$       | N              | <u> </u>     |                | <del> </del>   | -            | -            | <u> </u> | . 1  | $\vdash$               | 97       | <u> </u>     | $\vdash$   | Н               |  | -        |          | -        |          |          | ·    |       | 147      | +              | +     | +   | 4        | -        | $\dashv$ | _        |          |          |
|          | 48        | <u> </u>     | $\vdash$       | 2              | <u> </u>     |                | <u> </u>       | -            | -            |          |      |                        | 98       | ├            | <u> </u>   | -               |  | -        | -+       | _        | $\dashv$ | _        | -    |       | 148      | -              | +     | +   | -        |          |          |          | $\dashv$ | _        |
| <u> </u> | 49        | <u> </u>     |                | Z              | <u> </u>     |                | -              | -            | $\vdash$     | _        |      | $\vdash$               | 99       | $\vdash$     | $\vdash$   | Н               |  |          | $\dashv$ | _        |          | 4        | -    |       | 149      | +              | +     | +   | -        | -        | -        | _        |          | 괵        |
|          | 50        | L            |                | 7              | l            | l              | l              | <u> </u>     |              |          |      | l 1                    | 100      | l .          | I          | ŀl              |  |          | - 1      | - 1      | - 1      |          | ı    |       | 150      | - 1            |       |     |          |          | - 1      |          |          | - 1      |